

Patent Claims

1. A tubular food casing having a coated flat-shaped reinforcement insert which comprises at least one coating of at least one film-forming protein.  
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2. The food casing as claimed in claim 1, wherein the flat-shaped insert is a consolidated nonwoven or spunbonded fabric, a woven fabric, loop-formingly knitted fabric, loop-drawingly knitted fabric, laid fabric or a porous film.  
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3. The food casing as claimed in claim 1 or 2, wherein the flat-shaped insert is impregnated.  
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4. The food casing as claimed in one or more of claims 1 to 3, wherein the flat-shaped insert comprises natural and/or artificial fibers, preferably cotton, regenerated cellulose, silk, polyester, polyamide, polyolefin, polyvinyl acetate, polyacrylonitrile, polyvinyl chloride, a corresponding copolymer or a mixture thereof.  
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5. The food casing as claimed in one or more of claims 1 to 4, wherein the flat-shaped insert has a weight of 3 to 400 g/m<sup>2</sup>, preferably 10 to 130 g/m<sup>2</sup>, particularly preferably 12 to 75 g/m<sup>2</sup>.  
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6. The food casing as claimed in one or more of claims 1 to 5, wherein the protein comprises gelatin and collagen.  
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7. The food casing as claimed in one or more of claims 1 to 6, wherein the fraction of protein is 2.5 to 95 % by weight, preferably 20 to 80 % by weight,  
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particularly preferably 30 to 75 % by weight, in each case based on the total coating weight of the casing.

8. The food casing as claimed in one or more of claims 1  
5 to 7, wherein the coating, in addition to at least one protein, comprises at least one further natural and/or synthetic polymer.
9. The food casing as claimed in claim 8, wherein the  
10 further natural or synthetic polymer is a polyacrylate, polyvinyl acetate and/or a (co)polymer having units of vinyl acetate and/or units of saponified vinyl acetate (vinyl alcohol).
- 15 10. The food casing as claimed in one or more of claims 1 to 9, wherein the further natural or synthetic polymer acts as a primary plasticizer.
11. The food casing as claimed in claim 10, wherein the  
20 further natural or synthetic polymer is an alginate, a polyvinylpyrrolidone, a quaternary vinylpyrrolidone copolymer, a copolymer having units of vinylpyrrolidone, maleic anhydride or methyl vinyl ether or a branched polysaccharide.
- 25 12. The food casing as claimed in claim 8, wherein the fraction of the at least one further natural and/or synthetic polymer is up to 50 % by weight, preferably 5 to 40 % by weight, particularly preferably 6 to 30 25 % by weight, in each case based on the dry weight of the casing.
13. The food casing as claimed in one or more of claims 1 to 10, wherein the food casing comprises at least one compound which crosslinks the protein and thereby  
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decreases or cancels its water solubility.

14. The food casing as claimed in claim 13, wherein the crosslinker is epoxidized linseed oil, a diketene having ( $C_{10}$ - $C_{18}$ ) alkyl radicals, caramel, tannin, a diepoxide, citral, an aziridine, glyoxal, glutardialdehyde and/or a polyamine-polyamide-epichlorohydrin resin.  
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- 10 15. The food casing as claimed in one or more of claims 1 to 14, wherein the food casing comprises dyes and/or pigments.
- 15 16. The food casing as claimed in claim 15, wherein the fraction of dyes and/or pigments is 0.5 to 12.0 % by weight, preferably 1.0 to 6.0 % by weight, in each case based on the dry weight of the casing.
- 20 17. The food casing as claimed in one or more of claims 1 to 16, wherein the food casing additionally has at least one further casing which does not comprise protein.
- 25 18. The food casing as claimed in one or more of claims 1 to 17, wherein the further layer is a layer based on polyacrylate, polyvinyl acetate (PVA), polyvinylpyrrolidone, polyvinylidene chloride (PVDC), polyvinyl chloride (PVC), polyvinyl alcohol (PVOH), synthetic rubber, latex, silicone or any mixture thereof.  
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- 35 19. The food casing as claimed in one or more of claims 1 to 18, wherein the food casing is internally and/or externally impregnated, preferably with agents which serve to set the sausage emulsion adhesion or for

improving the mold resistance, and/or agents which comprise transferrable dyes, aroma substances, odor substances and/or flavor substances.

- 5    20. The food casing as claimed in one or more of claims 1 to 19, wherein the food casing has one longitudinal seam, preferably a glued, sealed, or welded seam, or a sewed seam.
- 10   21. A method for producing the food casing as claimed in one or more of claims 1 to 19, which comprises forming a flat-shaped support material having a predetermined width into a tube, charging the tube with supporting air to maintain its shape or holding it in its round shape by caliber support rings and providing it internally and/or externally seamlessly with the protein-containing coating.
- 15   22. A method for producing the food casing as claimed in one or more of claims 1 to 20, which comprises providing a flat-shaped support material on one or both sides with the protein-containing coating, cutting the coated support material if appropriate to appropriate width and forming it to a tube, bonding its overlapping longitudinal edges firmly to one another, preferably by sewing, gluing, sealing or welding.
- 20   23. The use of the food casing as claimed in one or more of claims 1 to 20 as artificial sausage casing, preferably for raw meat sausage, scalded-emulsion sausage, or cooked-meat sausage, or as cheese casing.